

REMARKS

Claims 1 and 3-5 are all the claims pending in the application.

Obviousness Rejection

On page 3 of the Office Action, in paragraph 7, claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over UETANI et al '779 in view of UETANI et al '657.

The Examiner's position is set forth in detail in the Office Action and will not be repeated here for purposes of brevity.

In response to this rejection, Applicants submit initially that UETANI et al '779 does not teach or suggest that a sensitizer of the compound of Formula (III) as recited in the present claims is added to a positive photoresist composition, as recognized by the Examiner.

Further, Applicants submit that UETANI et al '657 does not teach or suggest that the quinonediazide ester of the compound of Formula (II) as recited in the present claims is added to a positive photoresist composition, although they teach that the sensitizer of the compound represented by Formula (III) described in the claims is added.

Applicants submit that the '657 and '779 references do not teach or suggest anything with respect to the effects of causing less shrink, which is not an expected effect. In order to cause less shrink, it is necessary to mix ingredient (B) represented by Formula (II) as recited in the present claims with ingredient (C) represented by Formula (III) as recited in the present claims. Applicants submit that the present invention thus provides unexpectedly superior results.

In order to demonstrate the unexpected superiority of the present invention, Applicants submit herewith an executed Rule 132 Declaration.

As set forth in the Rule 132 Declaration, a series of positive photoresist compositions was prepared in the same manner as in Example 1 of the present application, except that the ingredients (B) and (C) used in Example 1 were changed to those indicated in Table 1.

Table 1

	Ingredient (B) (compositional ratio (wt.%))	Ingredient (C) (compositional ratio (wt.%))
1	b2 (100)	c5 (100)
2	b2 (100)	c6 (100)
3	b2 (100)	c7 (100)

In the same manner as in Example 1, the Sensitivity, Definition and Shrink were evaluated regarding the above described compositions. The results are shown in Table 2.

Table 2

	Sensitivity (ms)	Definition (μm)	Shrink Evaluation
1	460	0.32	Fair
2	430	0.32	Fair
3	460	0.32	Fair
Ex. 2	430	0.30	Excellent

As shown in Table 2, the results of all of the comparative samples are “Fair” with respect to Shrink Evaluation. The compositions containing b2 as ingredient (B) and the sensitizer other than ingredient (C) (c5, c6 and c7 as described above) did not exhibit less shrink.

Thus, it is evident that ingredient b2 must be mixed with ingredient c1 in order to cause less shrink.

Further, as described in the present specification, Comp. Ex. 4 composed of b5 and c1 and Comp. Ex. 5 composed of b6 and c1 both exhibited shrink.

Thus, in order to cause less shrink, it is evident that ingredient (B) as recited in the present claims must be mixed with ingredient (C) as recited in the present claims.

Since such a requirement to achieve less shrink was not recognized previously in the art, Applicants submit that present invention provides unexpectedly superior results and is not obvious accordingly.

Therefore, withdrawal of this rejection is respectfully requested.

REQUEST FOR RECONSIDERATION
U.S. Application No.: 10/035,137

Attorney Docket No.: Q67940

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Bruce E. Kramer
Registration No. 33,725

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: April 12, 2004